REMARKS

Claims 1 and 26 are amended herein. Claims 1-9 and 24-27 remain pending in the captioned case. Reconsideration of the presently claimed application are respectfully requested.

Section 112, 2nd Paragraph, Rejections

Claims 1-9 and 24-27 stand rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, various features recited in claim 1 were rejected for being vague and indefinite. Claims 2-9 and 24-27 were rejected for being dependent on a rejected base claim. To expedite prosecution, claim 1 is amended to clarify the language recited therein. The amendments made to claim 1 are believed to overcome the concerns expressed in the Decision on Appeal.

Throughout prosecution, the Examiner maintains the contention that because the carrier frequency of the transmitted signal is unknown, the method recited in claim 1 cannot be carried out because the exact wavelength of the transmitted signal, and thus, the exact length of the apparatus is unknown prior to forming the apparatus. The Examiner insists that the exact wavelength, as well as the size and shape of the apparatus, must be known (i.e., claimed) in order for a skilled artisan to make the apparatus, and thus, render the claim definite (Final Office Action mailed July 6, 2007 at pp. 2, 4).

The Board of Patent Appeals and Interferences (BPAI) agreed with the Appellant that claim 1 does not need to recite an exact apparatus length or transmitted signal wavelength to render the claim definite, as breadth does not equate to indefiniteness (BPAI Decision on Appeal at pg. 7). However, the BPAI sustained the 35 U.S.C. § 112, second paragraph, rejection of claims 1-9 and 24-27 "because the metes and bounds of the configuration of the resonant circuit elements, which

resonate 'at or near a carrier frequency,' and the length of the apparatus, which is 'one-half of the transmitted signal wavelength,' are insolubly ambiguous" (BPAI Decision on Appeal at pg. 12).

The BPAI considers the phrase "at or near a carrier frequency" to be ambiguous, since resonant circuit elements that can resonate "at or near" a frequency implies that the elements can "resonate" over a range of frequencies, possibly resonating to different degrees at different frequencies (BPAI Decision on Appeal at pg. 8).

In order to clarify the claimed apparatus, claim 1 is amended to recite, "a plurality of resonant circuit elements, each configured to resonate at a carrier frequency of a signal transmitted by one of the pair of antennas… ." Support for the amendment made to claim 1 may be found in the present specification, e.g., on page 31, lines 6-9 and 31-33. The amendment addresses the concerns expressed in the Decision on Appeal by specifying that each of the resonant circuit elements is configured to resonate at the same frequency (i.e., the carrier frequency of the transmitted signal, which is noted below as being a fixed frequency). Specifying that the resonant circuit elements resonate at the carrier frequency removes ambiguity from the claim and enables a skilled artisan to easily determine the frequency at which the elements can resonate.

The BPAI also considered the length of the apparatus to be ambiguous because claim 1 previously required the apparatus's length to be determined by a transmitted signal wavelength, not the carrier signal wavelength. The BPAI relied upon the definition of a "carrier wave" to support the finding of ambiguity. For example, the BPAI stated in their Decision that a "carrier frequency" refers to the frequency of a radio wave of fixed amplitude and frequency that is modulated to carry a signal in a radio transmission, and is thus distinguishable from the actual signal transmitted. The BPAI suggests that, even if one of ordinary skill in the art were provided the carrier frequency, there would exist a wide range of modulated carrier frequencies that could be transmitted as the "transmitted signal." Thus, the BPAI concludes that it would not be clear which transmitted signal wavelength would be used to determine the apparatus's length (BPAI Decision on Appeal at pp. 10-11).

In order to clarify the claimed apparatus, claim 1 is amended to recite, "wherein by the steps of extracting and folding, the apparatus is formed having a length substantially equal to one-half of a wavelength corresponding to the carrier frequency." Support for the amendment made to claim 1 may be found in the present specification, e.g., on page 27, EQ. 1, page 31, lines 6-9 and 31-33, and page 33, lines 10-26. The amendment addresses the concerns expressed in the Decision on Appeal by specifying that the length of the apparatus is substantially equal to one-half of the carrier signal wavelength, which as noted in the Decision, is a fixed wavelength. Basing the length of the apparatus on a fixed wavelength removes ambiguity from the claim and enables a skilled artisan to easily determine the length of the claimed apparatus.

For at least the reasons set forth above, Applicants believe the currently pending claims particularly point out and distinctly claim the subject matter which applicant regards as the invention. Accordingly, Applicants respectfully request removal of this rejection.

CONCLUSION

The present amendment and response is believed to be a complete response to the issues raised in the Decision on Appeal mailed March 29, 2010. In light of the amendments and remarks herein, Applicants believe that pending claims 1-9 and 24-27 are in condition for allowance. If the Examiner has any questions, comments, or suggestions, the undersigned attorney earnestly requests a telephone conference.

No fees are required for filing this amendment; however, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment, to Daffer McDaniel, LLP Deposit Account No. 50-3268.

Respectfully submitted,

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JMF